

about four years. Some of his earliest plates, after quitting him, appeared in the *Beauties of England and Wales*; and in 1808 he was employed upon the plates of *Britton's Architectural Antiquities*, the second volume of which was then in course of publication. From that time the history of John Le Keux is intimately connected with that of Mr. Britton's numerous and valuable works of ancient ecclesiastical architecture. During the progress of the *Architectural and the Cathedral Antiquities*, he engraved more than 250 plates for those two works alone. The execution of the earliest of these not only gave great satisfaction to the author and his partners in the *Architectural Antiquities*, but excited much attention amongst the lovers and patrons of that class of literature. Indeed, it tended in a great degree, if not to originate, at least to give a decided character to the other and subsequent work, the *Cathedral Antiquities*. To secure Mr. Le Keux's cordial co-operation, and to give him a permanent interest in the success of the last-mentioned work, he was admitted to a share in its property and profits, with the author, Messrs. Longman and Co., and Mr. Josiah Taylor, the late respected publisher of many architectural works. Le Keux engaged to engrave a certain number of plates in each year, at prices proportionate to the quantity of work bestowed upon them; those in the volume illustrating *Saltbury Cathedral* being named as specimens. From drawings by Mackenzie and Baxter, Mr. Le Keux executed sixteen plates of that cathedral, which were so much admired and praised by critics, artists, and connoisseurs that, whilst they produced both envy and opposition,* they gave to the artist at once a character and name, and proved how materially the efforts of the draftsman could be aided by a skilful and tasteful engraver. Many instances might be referred to in the subsequent progress of the *Cathedral Antiquities*, as well as in other works, in which the chief excellence of the illustrations is due to Mr. Le Keux. That work was not brought to a close till the year 1835; but during its progress the same engraver had executed thirty-one plates for Britton's *Picturesque Antiquities of English Cities* (4to. 1830), seventy-eight for the *Public Buildings of London* (from drawings by A. Pugin, 8vo. 1825-8), and forty for Britton's *Dictionary of Architecture and Archaeology*; making, with other plates in similar publications, upwards of 400 plates for works jointly undertaken by the same proprietors. It was also in connection as a partner with Mr. Britton and Mr. Pugin that Le Keux engraved fifty of the beautiful plates, illustrating the *Architectural Antiquities of Normandy*, (4to. 1827), and many of those in Pugin's *Specimens of Gothic Architecture*.

In Mr. J. H. Neale's work on *Churches*, all the plates were engraved by Le Keux; and some of his best engravings are also to be found in Neale and Brayley's *Westminster Abbey*, Blome's *Sepulchral Monuments*, and the fine topographical works of George Baker, and others, had also the advantage of his talents. In fact, his name is to be found in all the best publications illustrative of the architecture of the middle ages that appeared in his time; and many of his engravings can scarcely be surpassed in spirit, brilliancy of effect, and truthfulness of delineation.† Mr. Le Keux's personal industry could scarcely be surpassed. It is sufficiently proved by the immense number of his plates. He had but few pupils, and often occupied himself in his profession sixteen hours a day. Challis, Turnbull, Tingle, and his son, Mr. J. H. Le Keux,

have been the most successful among those who studied under him.

In 1833, Mr. Le Keux commenced the publication of the *Memorials of Oxford*, in which he and Mr. Parker, of Oxford, were joint proprietors. In that work the many architectural beauties of the city and university—admirably drawn by Mackenzie—were still more exquisitely engraved by Le Keux. It was published in numbers (8vo. and 4to.) periodically, and completed in 1837,—the 50th number, to conclude the work, being published in that year. The *Memorials* comprise 100 plates; and 200 woodcuts, by Jewitt, of Oxford. The letter-press was written by the Rev. Dr. Ingram, the learned president of Trinity College.

About this time we find him engaged on the *Churches of London*, by Mr. George Godwin, for which publication he engraved nearly all the plates.

On the completion of the *Oxford*, Mr. Le Keux turned his attention to the sister university, which he proposed to illustrate in the same manner. Mr. Parker had purchased his interest in the former previous to its completion; and the success of that work led Mr. Le Keux to decide on publishing the *Memorials of Cambridge* entirely at his own risk. This undertaking was less extensive than the *Oxford*, and was completed, after many delays, caused by the engraver's serious and painful illness, in 1843, by the publication of the thirty-eighth number. The two volumes, containing seventy-six plates, are in no degree inferior to any of Le Keux's previous works. The jealousy of local booksellers, and other annoyances incidental to the mode of publication which he had adopted, it is believed caused him to regret his determination; but he persevered until the work was finished, though Messrs. Tilt and Bogue have since become the proprietors of it. The letter-press was written by Mr. Thos. Wright, F.S.A., and the Rev. H. L. Jones, F.R.A.

The distressing illness which deprived the public for some years towards the close of his life of the labours of Mr. Le Keux, has been adverted to. Under this affliction he was soothed by the affection of his son-in-law and daughter, Mr. and Mrs. Bergmann, with whom he resided, near Maidenhead. His pecuniarily resumed the exercise of his profession, but never to any great extent. After a brief illness, he died on the 2nd of April last, aged 63, at the residence of his son, Mr. J. H. Le Keux, who manifested much dutiful affection and attention, and he was interred in the cemetery of Bunhill-row, London.

IRON CONSERVATORY IN THE BOTANIC GARDENS, REGENT'S PARK.

A very few years have sufficed, with good management, to transform a piece of nearly barren land, in the Regent's Park, into luxuriant gardens, affording a retreat as quiet, retired, and beautiful, as if fifty miles from smoky, fuming London. A pleasant inequality of surface, well-wooded trees, and pretty pieces of water, assist in varying the character of the gardens in different parts. The view on ascending the mound, formed on the eastern side of the ground, is charming, and the whole arrangement is creditable to those concerned in the management.

A new conservatory has been constructed under the direction of Mr. Decimus Burton, and is now nearly finished. Although of large size, it is in reality only half the centre part of the proposed building, to be called the Winter Garden, which will, when complete, afford a delightful resort for the numerous subscribers, and enable them to enjoy the luxury of the *parterre* at all seasons.

The building is constructed of iron, mostly wrought, the pillars and girders alone being cast. The water from the roofs is conducted by the internal pillars, to drains communicating with large tanks under ground, from whence it is pumped up for the supply of the house. The house is heated by warm water, circulating partly in pipes and partly in shallow troughs, the latter being placed near the glass, and containing numerous registers for the emission of steam, when required. The pipes are arranged beneath the surface, in brick channels, and have large outlets for the hot air, with air ducts at intervals, to create a current, and prevent the too sluggish action

of the hot air in the drains. The boiler-house, or furnace-room, is below ground, at some distance from the building. The boilers used by the contractor are those of Messrs. Barbridge and Healy.

The structure is ventilated by sliding lights in the roof, acted on by a simple contrivance, which opens and shuts the whole simultaneously. The house is glazed with sheet glass, 21 in. to the foot, in long lengths. There is a lean-to house at each end of the building, to serve as abutments; these will be removed when the structure is continued.

The present building contains eleven thousand two hundred and fifty feet superficial. It was erected by Mr. Turner, of the Hammer-smith Iron Works, Dublin, and cost about 6,000*l*.

The winter garden, when completed, will measure fifty thousand pine hundred and eighty-two feet, superficial area, or upwards of an acre. The outline of the roof (an obtuse pointed arch), when seen inside at the intersections, is not wholly objectionable, but was doubtless well considered as relates to strength, and the transmission of the sun's rays.

PLASTER AND CEMENTS. BUILDINGS OF MIXED MATERIALS.

Sir,—Having given considerable attention to the nature and properties of plaster of Paris and cements, as applied to building purposes, you will probably allow me a space in your valuable miscellany, to make a few scattered remarks relative to the observations made on French plaster by Mr. De Lassaux, at the meeting of the Institute of Architects, noticed in the *THE BUILDER* of the 16th of May last.

Mr. De Lassaux stated, that "in France plaster is employed extensively for external works, and endures well; whereas that in England will not stand the weather." Are we to infer from the latter portion of this sentence that the English gypsum, from which the plaster of Paris is manufactured, is inferior to the crude material of France, and that plaster made from the French stone will resist the action of our atmosphere for a considerable number of years?

With all due respect and courtesy to Mr. De Lassaux, as a foreigner and a man of science, I most distinctly say to the contrary, for experience has taught us, that it is vain to try the experiment in our climate, for the very best plaster that can be made in Europe will not resist the humid, variable, and ungenial atmosphere of Great Britain, particularly in the more northern portions of the country. We have tried various experiments, both with the English and French plaster stones, and the results have invariably been in favour of the English article, both as regards strength and colour; of course, relative to the latter quality, neither the French nor English alabaster will bear any comparison with that found in such abundance in Tuscany and other parts of Italy,—but this is inferior to the English in strength.

The statement made by one member that the cost of plaster is 3*l*. 1*l*. 6*s*. and 4*l*. 5*s*. in England, seems erroneous, for I observe it is advertized in *THE BUILDER* by Chas. Godwin, in London, at 2*l*. 10*s*. and 3*l*. 4*s*., and it is sold at Carlisle, where it abounds, under 3*l*. 10*s*. per ton, and at Newcastle-upon-Tyne at 2*l*. 15*s*.

The very nature of plaster (it being a sulphate of lime, and consequently an absorbent of damp and wet) at once renders it perfectly and totally unfit for external adaptation, except in a dry and mild climate of southern latitude, and perhaps it may not be deemed out of place to observe, that the external plaster work of England suffers more by the sudden changes of the weather than the continuance of wet or damp; take for instance two or three days of continued rain, succeeded by a severe frost, and immediately after it a rapid thaw, which would assuredly have the effect of forcing plaster entirely away from the ground-work, on which it had been formed; in consequence of its having in the first instance absorbed the wet. These remarks lead me to advocate the very great superiority of pure genuine Roman cement, as an external stucco; for, in the first place, it is perfectly repellant of wet and damp, consequently very

* The Verger of Salisbury Cathedral, Mr. Dodsworth, who had published a small "Guide" to the church, was induced by the persuasions of an artist, who was at the same time employed to make drawings for Mr. Britton, to undertake a work precisely similar, and in direct opposition, to the *Cathedral Antiquities*. From local connection, great anxiety, and personal canvassing, Dodsworth obtained a large and respectable list of subscribers; but the plates in his volume were far inferior to those in Mr. Britton's, and he became involved in expenditure so far beyond his anticipation, and in labours and anxieties so harassing to an irritable temperament, that instead of advancing his fortune or happiness, his undertaking seems to have injured both. The letter-press accompanying the volume, from the pen of the judicious and learned Mr. Henry Raper, of Salisbury, who has since written a most valuable history of that city. An account of the rival works of Dodsworth and Britton would disclose much curious matter in the annals of authorship and the arts, and add another gloomy chapter to Dr. Israel's *Quarrels of Authors*.

† The engraving of the font in Walsingham Church, Norfolk (Britton's *Arch. Antiquities*, vol. i.), and the doorway to Bealcliffe Church, in the same volume, excited much attention and admiration at the time they were published, for their exquisite facility and brilliancy of effect.